

Amendments to the Claims:

1. (Previously Presented) A network gateway device capable of providing location-based identification to network subscribers, comprising:

a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port that provides connection for one or more hosts, the processor further determines which of the location-specific connection ports are currently accessing the network-by associating each of the received port identifiers with a location-specific connection port; and

a database associated with the network gateway device that stores the location-specific connection ports for the purpose of identifying one or more hosts associated with the connection port that have been granted network authorization.

2. (Canceled)

3. (Original) The network device of Claim 1, wherein the processor uses VLAN protocol as a communication link between the processor and the access concentrator.

4. (Currently Amended) The network device of Claim 1, wherein the processor further comprises a querying agent capable of requesting transmission of the plurality of port identifiers from the associated access concentrator in response to receipt of data packets that fail to include location information.

5. (Original) The network device of Claim 4, wherein the querying agent uses Simple Network Management Protocol (SNMP) as the communication link between the network device and the access concentrator.

6. (Original) The network device of Claim 4, wherein the querying agent uses Extensible Markup Language (XML) as the communication link between the network device and the access concentrator.

7. (Previously Presented) A method for implementing location-based identification in a communications network, comprising the steps of:

establishing network connections between a plurality of hosts and a network,
wherein each host is connected to the network at a location-specific, connection port;

transmitting data packets from each of the hosts;

identifying the location-specific, connection port of each of the hosts at an access concentrator by assigning one of a plurality of port identifiers that is mapped to the a location of the connection port;

communicating the port identifier to a network gateway device;

storing the port identifier in a database in communication with the network gateway device, the database maps the port identifier to one or more hosts associated with the connection port, and

identifying, at the network gateway device, one or more hosts that have been granted network authorization based upon port identifiers that are currently stored in the database.

8. (Previously Presented) The method of Claim 7, wherein identifying the location-specific, connection port of each of the hosts at an access concentrator further comprises tagging the data packets being sent from each host with one of a plurality of port identifiers at an access concentrator.

9. (Previously Presented) The method of Claim 8, wherein communicating the port identifier to a network gateway device further comprises transmitting the tagged data packets to a network gateway device.

10. (Previously Presented) The method of Claim 8, wherein tagging the data packets being sent from each host with one of a plurality of port identifiers further comprises tagging the data packets being sent from each host with one of a plurality of port identifiers that corresponds to a media access control (MAC) address.

11. (Previously Presented) The method of Claim 8, wherein tagging the data packets being sent from each host with one of a plurality of port identifiers includes implementing the use of VLAN protocol.

12. (Canceled)

13. (Currently Amended) The method of Claim 7, wherein the step of communicating the port identifier to a network gateway device further comprises the steps of:

transmitting a port requesting query from the network gateway device to an access concentrator in response to receipt of data packets that fail to include location information; and

transmitting a port identifying response from the access concentrator to the network gateway device.

14. (Previously Presented) The method of Claim 13, wherein transmitting a port requesting query from the network gateway device further comprises transmitting a SNMP (Simple Network Management Protocol) query.

15. (Previously Presented) The method of Claim 13, wherein transmitting a port requesting query from the network gateway device further comprises transmitting a XML (Extensible Markup Language) query.

16. (Original) The method of Claim 13, wherein transmitting a port identifying response further comprises transmitting a port identifier that corresponds with a media access control (MAC) address.

17. (Canceled)

18. (Currently Amended) A method for using location-based identification in a communications network, comprising:

accessing a database in communication with a network gateway device to identify one or more location-specific connection ports within a communications network that are currently mapped to a port identifier; and
applying results of the identification to a network system application.

19. (Canceled)

20. (Previously Presented) The method of Claim 18, further comprising executing the network system application at the network gateway device.

21. (Currently Amended) The method of Claim 18, wherein applying results of the identification to a network system application further comprises applying the identified one or more location-specific connection ports to a network billing application that bills subscribers based on location.

22. (Currently Amended) The method of Claim 18, wherein applying results of the identification to a network system application further comprises applying the identified one or more location-specific connection ports to an authorization application that provides authorization to network subscribers based on location.

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23. (Currently Amended) The method of Claim 18, wherein applying the results of the identification to a network system application further comprises applying the identified one or more of location-specific connection port ports to determine port-specific information that will be communicated to a connection port.